

IN THE CLAIMS:

1. (Cancelled)
2. (Cancelled)
3. (Cancelled)
4. (Cancelled)
5. (Cancelled)
6. (Cancelled)
7. (Cancelled)
8. (Currently amended) A method of activating a CFTR protein comprising:  
  
applying a polypeptide to a CFTR protein which forms a cAMP regulated chloride channel, said polypeptide comprising a portion of CFTR protein of between about ~~40~~ 18 and 100 amino ~~acids~~ acid residues, said portion comprising 18 contiguous amino ~~acids~~ acid residues as shown in SEQ ID NO: 1, whereby the open probability of the channel formed by the CFTR increases by at least 25%.
9. (Original) The method of claim 8 wherein the open probability of the channel formed by the CFTR increases by at least 50%.
10. (Original) The method of claim 8 wherein the open probability of the channel formed by the CFTR increases by at least 75%.
11. (Original) The method of claim 8 wherein the open probability of the channel formed by the CFTR increases by at least 100%.
12. (Original) The method of claim 8 wherein the open probability of the channel formed by the CFTR increases by at least 125%.

13. (Original) The method of claim 8 wherein the open probability of the channel formed by the CFTR increases by at least 150%.
14. (Original) The method of claim 8 wherein the open probability of the channel formed by the CFTR increases by at least 200%.
15. (Cancelled)
16. (Cancelled)
17. (Cancelled)
18. (Original) The method of claim 8 wherein the CFTR protein is in a lipid bilayer and a change in conductance is measured upon applying the polypeptide.
19. (Cancelled)
20. (Cancelled)
21. (Currently amended) A method of activating a CFTR protein comprising:
  - applying a polypeptide to a CFTR protein which forms a cAMP regulated chloride channel, said polypeptide comprising a portion of CFTR protein of between ~~40~~ 22 and 100 amino ~~acids~~ acid residues, said portion comprising 22 contiguous amino acids ~~acid residues~~ as shown in SEQ ID NO: ~~4~~ 2,
  - whereby the open probability of the channel formed by the CFTR increases by at least 25%.
22. (Original) The method of claim 21 wherein the open probability of the channel formed by the CFTR increases by at least 50%.
23. (Original) The method of claim 21 wherein the open probability of the channel formed by the CFTR increases by at least 75%.
24. (Original) The method of claim 21 wherein the open probability of the channel

formed by the CFTR increases by at least 100%.

25. (Original) The method of claim 21 wherein the open probability of the channel formed by the CFTR increases by at least 125%.

26. (Original) The method of claim 21 wherein the open probability of the channel formed by the CFTR increases by at least 150%.

27. (Original) The method of claim 21 wherein the open probability of the channel formed by the CFTR increases by at least 200%.

28. (Cancelled)

29. (Cancelled)

30. (Cancelled)

31. (Original) The method of claim 21 wherein the CFTR protein is in a lipid bilayer and a change in conductance is measured upon applying the polypeptide.

32. (Cancelled)

33. (Cancelled)

34. (Original) The method of claim 8 or 21 wherein the polypeptide is free of phosphorylation.

The Rejection Under 35 U.S.C. § 112, first paragraph

Claims 8-14, 18, 21-27, 31, and 34 are rejected as not enabled or adequately disclosed for their full scope. The rejection asserts that the specification enables 10 to 100 contiguous amino acids of SEQ ID NO:1 but not any non-contiguous 10 to 100 amino acids of SEQ ID NO:1.

Applicants believe that independent claims 8 and 21 as originally filed can only be reasonably construed as requiring that the amino acid residues be contiguous. Original claims 8 and 21 each recited “a portion of CFTR protein of between about 10 and 100 amino acids.” Applicants believe that this phrase can only be reasonably construed as requiring amino acid residues of CFTR protein in the sequence they occur in the CFTR protein. The phrase cannot be reasonably construed as any 10 to 100 amino acid residues disaggregated and/or rearranged. Nonetheless, to ensure that the claims are clear, applicants have amended claims 8 and 21 to recite “contiguous amino acid residues as shown in SEQ ID NO:1” or 2. This amendment does not narrow the scope of the claims but merely clarifies the meaning intended by applicants.

Withdrawal of the rejection is respectfully requested.

The Rejection Under 35 U.S.C. § 112, second paragraph

Claims 8-14, 18, 21-27, 31, and 34 are rejected as indefinite at the lower limit of the size of the peptide. Claims 8 and 21 have been amended to recite that the polypeptide is between about 18 and 100 amino acid residues or between about 22 and 100 amino acid residues, thus harmonizing two apparently inconsistent recitations.

Withdrawal of the rejection is respectfully requested.

The Rejection Under 35 U.S.C. § 102(b)